Royal United Hospitals Bath
NHS Foundation Trust

Radical prostatectomy

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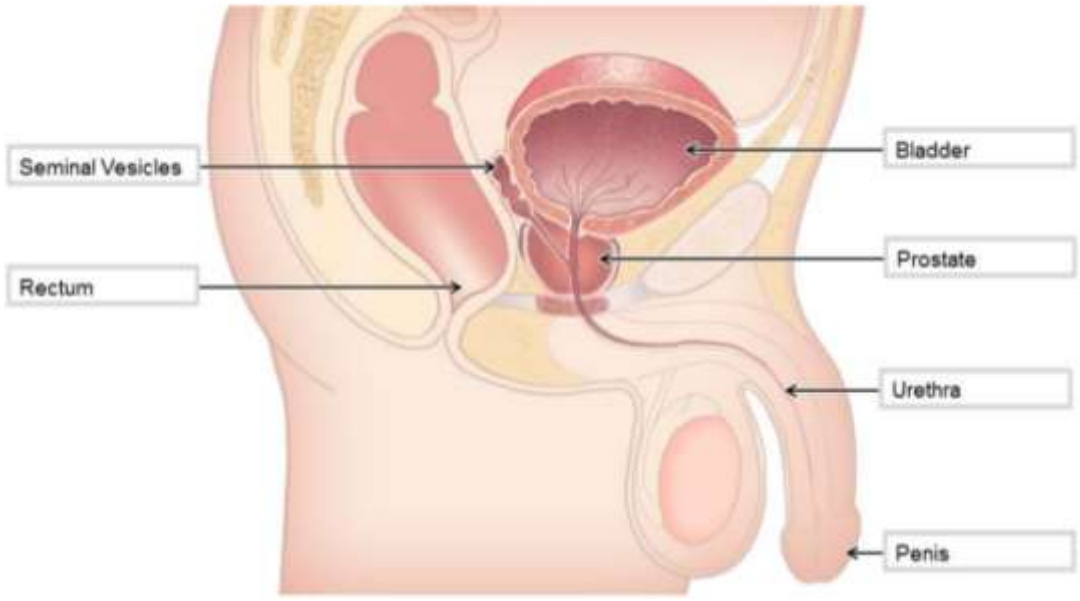
Having a laparoscopic radical prostatectomy

One of the options for treating your prostate cancer is a ‘radical prostatectomy’, surgery to remove the whole of the prostate gland. This information sheet tells you about the operation, and the possible risks

The Prostate

The prostate is a small organ which sits below the bladder and wraps around the water pipe (urethra). The prostate makes some of the semen and is probably important in making a man fertile. As men get older, the prostate grows larger, and this can cause some problems in passing urine. Cancer can also develop in the prostate, producing similar symptoms, or a high level of PSA (prostate specific antigen) in the blood.



What is a Laparoscopic Radical Prostatectomy

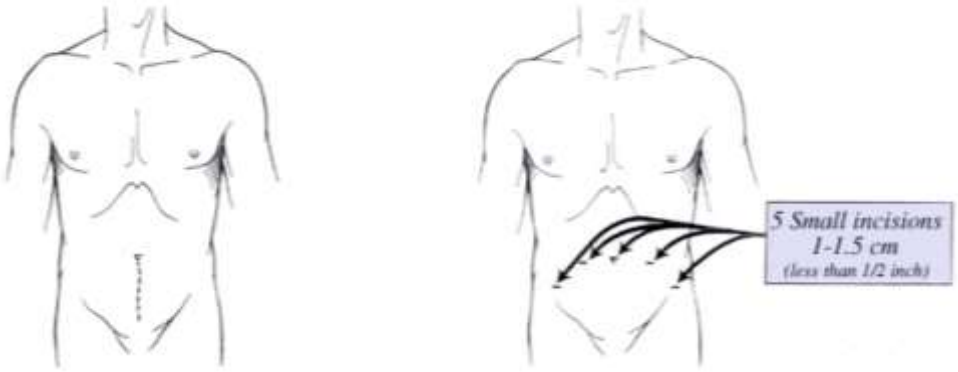
Laparoscopic radical prostatectomy (LRP) is a keyhole operation to remove the whole of the prostate and the tumour within it. The ‘seminal vesicles’ are also removed. These are small organs lying next to the prostate which are used to store sperm, and sometimes can be involved with the cancer. Once the prostate has been removed, the bladder is joined back onto the urethra.

Sometimes it is also necessary to remove the ‘lymph glands’. Lymph glands are small pieces of tissue which are found all over the body. Their normal function is to filter the tissue fluid (or lymph) looking for signs of infection. Cancerous cells may spread to the lymph glands, and if we feel there is any chance of this having happened we will remove them. You won’t miss the lymph glands we remove, because you have hundreds of others all over the body which will make up for the few that you lose. Rarely however removing the lymph glands can cause some additional side-effects (see below)

How is the operation performed?

Radical prostatectomy used to have a high risk of side-effects such as impotence and incontinence of urine, but with modern techniques the risks of these problems are now much less. The traditional “open” operation is performed with a cut (about 4-6 inches long) on the lower stomach below the belly button. Most men recover quickly from the surgery, spending about 3 days in hospital, and needing 4 weeks recuperation at home.

Laparoscopic radical prostatectomy (LRP) is a new way of treating prostate cancer which offers advantages over the open operation. LRP is keyhole surgery, performed through several small cuts in the stomach. Because of this, men recover more rapidly than with the open technique, spend less time in hospital and get back to normal activities quicker.



Open radical prostatectomy

Laparoscopic radical prostatectomy

In addition to these advantages, LRP also has fewer long-term side effects than open surgery. In particular, the risk of incontinence of urine and loss of erections are less.

LRP is still not available in many UK hospitals, as it is a technically difficult operation, and takes a long time to learn properly, needing specialist training. In Bath we have been fortunate to be trained by surgeons from Bordeaux, the leading centre in the world for LRP. Virtually all prostate operations in Bath are now performed using the keyhole technique, although rarely it may still be necessary to do an ‘open’ operation.

After the operation

After the operation, you may have several tubes in place;

- A catheter to drain the urine. This will stay in for 7-10 days
- A drip in your arm to give you some extra fluids

- A drain into the operation site (often not needed).
  Most of the tubes will be removed within 24 hours. You will be allowed to eat and drink as soon as you are fully recovered from the anaesthetic, and you may do this on the evening of surgery if you wish. We will encourage you to get out of bed and start walking round the morning after the operation. You will be allowed to go home when you are eating, drinking and walking without any problems. For some men this is as early as the first day after surgery, the average being the second day, but occasionally you may need to stay for longer if there are minor problems.

Pain relief

Fortunately, with keyhole surgery pain is usually not a problem. Most men just need tablet painkillers. If these do not work well enough we can give a small painkilling injection. For some men, a 'PCA' (patient controlled analgesia) system is needed for the first day after the operation. This is a small device attached to the drip in your arm which allows you to control the amount of painkilling drugs you receive.

When you go home

[If you are using this template to write a patient information fact sheet, use the Information text font style – Arial 12pt] We use dissolvable stitches and glue to close the wound, so there are no stitches to be removed. You may get some discomfort from the wound for several weeks after the surgery; this is normal, but take simple painkillers such as paracetamol or ibuprofen if required.

You can bathe or shower as usual as long as you are careful with the wound. It is quite safe to get your wound wet a few days after your operation and to bath/shower with the catheter in place, but avoid scented soaps, creams or talc around the wound or catheter.

If your catheter falls out or becomes blocked DO NOT allow anyone else to try and flush the catheter or insert a new one. Contact the hospital using the numbers printed at the end of this sheet, and we will arrange for you to come up to hospital to sort the problem out.

Although you will be back to most normal activities fairly quickly (within 1-2 weeks), you need to avoid heavy exercise, lifting or straining for 4 weeks after the operation to allow the would to heal fully (6 weeks if you have an open operation).

You will not be able to drive until you feel you are able to make an emergency stop. This is usually at least two weeks after keyhole surgery, and at least four weeks after an open operation. You should check with your car insurance company before you start driving again.

While you have your catheter in position, it is important that you drink more than usual (approximate total 2-3 litres per day). This will help prevent urine infections, and will also flush out any bleeding. You may find that drinks that contain caffeine (tea, coffee, CocaCola, hot chocolate), as well as fizzy drinks and alcohol, will aggravate the bladder and are best avoided (although the occasional glass of wine or beer will do no harm). Cranberry juice also helps reduce the risk of urine infections.

During the first few weeks after your operation your bowel function may alter, this is normal. You may resume your normal diet, but if you are prone to constipation, eat plenty of fresh fruit and vegetables

Catheter removal

[If you are We will bring you back to hospital at least 7-14 days after the operation to remove the catheter. You will be able to go home later the same day. At this visit we will also show you how to use pads, talk about the pathology results from your operation and go over pelvic floor exercises with you.

The first few months

In the months after your operation, it is normal to feel a little tired and have less energy than usual. This is often the last side-effect to recover fully. You may have some mild discomfort, numbness or tightness around the scars. This is normal, as healing goes on for many months, and will disappear with time.

Most men regain their continence quickly, but for a few the problem continues. It is important to keep doing pelvic floor exercises. If your continence is a problem, discuss it with your Nurse Specialist or Consultant.

It is likely that you will be impotent (unable to have an erection) for at least some time after your operation. Impotence can often be overcome using a tablet, injection or vacuum pump. Your Nurse Specialist or Consultant will discuss these further with you. You should then be able to continue your sex life, although sensation of orgasm may be altered and you will no longer ejaculate resulting in infertility.

For the first year after the operation, we will see you every three months or so to check on your progress and measure your PSA level. When we are happy that your PSA level is stable and you have no ongoing problems (usually about a year after the operation), we will discharge you back to your GP. Some men will need follow-up in hospital for longer than this. Most men will require regular PSA tests for the rest of their life

Risks

Radical prostatectomy is generally a safe operation, but does carry significant risks of incontinence and impotence. In addition there are some ‘rare but serious’ risks you need to be aware of.

Common side effects

- Incontinence. Leakage of urine affects most men immediately after the surgery, but improves with time. Performing pelvic floor exercises regularly speeds up this process. Most men regain control of their waterworks fairly quickly, but it can take up to a year before this happens.

  About 1 in 30 men will be left with some degree of permanent leakage after keyhole surgery, but this is usually not troublesome and can be managed with pads. The risk is more with open surgery (about 1 in 10). Approximately 1 man in 100 will have severe troublesome leakage and may require further surgery to correct this. Sometimes this can be done with a relatively small telescope operation on the bladder, but it can require major surgery to insert an “artifical sphincter” to control leakage

- Impotence. The nerves which cause erections run very close to the prostate and are often damaged when the prostate is removed.

  A ‘nerve-sparing’ keyhole operation can be performed in most cases.This is done by carefully dissecting the nerves away from the prostate before it is removed. If both nerves can be saved, the risk of impotence following surgery is reduced to under 50%. Unfortunately this is not possible in all men, as sometimes preserving the nerves can risk leaving some of the cancer behind. We should be able to give you some idea of whether or not we will be able to preserve the nerves before the surgery, but the final decision can only be made during the operation

- Bleeding. Loss of blood is a frequent problem during this operation. A blood transfusion is sometimes needed following the surgery

Unusual side effects

- Bladder neck strictures. After the prostate is removed, the bladder is sewn back onto the urethra. The part of the bladder which is joined to the urethra is called the ‘bladder neck’. In roughly one man out of every 50 having this operation, scar tissue can form at the join and cause a blockage to the flow of urine. This is called a bladder neck stricture, and usually needs a small second operation (done through a telescope) to put it right.

  Sometimes this problem can recur after the corrective surgery; if this happens, we may teach you a technique called ‘intermittent self-catheterisation’. This involves passing a small lubricated tube up the urethra a few times a week, and prevents the scar tissue from developing.

- Penile shortening. Some men notice that their penis is shorter following the operation. The reasons for this are not clear; it may be due to the surgery itself, or possibly because of the lack of erections afterwards. The shortening is usually not severe, and sometimes improves with time

- Hernias. Approximately 3 out of every 100 men having the operation will develop a hernia (lump in the groin) within a year of the operation. It is easily fixed at a small operation

Rare side effects

All of these side effects are extremely uncommon, but it is important you are aware of them because they may be serious.

- Rectal injury. The prostate lies close to the rectum, which rarely may be damaged during the operation. If this occurs it can usually be repaired during the operation, but rarely it may be necessary to form a temporary colostomy (a bag to collect the faeces) to allow the injury to heal. A second small operation to close the colostomy would be necessary about three months later.
- Risks from a lymph node dissection. Some men undergoing radical prostatectomy also have their lymph nodes removed (see above). If the lymph nodes are removed, this can result in a build up of fluid in the groin – a 'lymphocele'. This can cause discomfort, and may need a small operation to drain the fluid. A lymphocele occurs in about 1 man in every 50 who undergo a lymph node dissection. Rarely, removal of the lymph nodes may also damage a nerve (the obturator nerve) which controls some of the hip muscles, resulting in some leg weakness.
- Damage to the ureter tube. This occurs in less than 1 out of every 100 men having a prostatectomy. If the injury is recognised straight away, it can be repaired. Sometimes it may only be recognised a few days after the surgery; a second operation may then be needed to fix it.
- A serious medical side effect (a problem not directly related to the operation, but occurring as a consequence of the stress of the surgery and anaesthetic). The commonest example of this would be a blood clot in the leg (a deep vein thrombosis, DVT) which breaks off and travels to the lung (a pulmonary embolus, PE). This can make you seriously unwell and cause lasting health damage. Other examples would include a serious infection, heart attack or stroke

Very rare side effects

- Death can occur from this surgery. Fortunately it is very rare. The overall rate is estimated at about 0.2% or 1 in 500.To put this into context, this is similar to the risk of an averagely healthy 65 year old man who is not undergoing surgery dying in the next three months.

Further Information

If you have any questions or need further information, please contact us:

Urology reception: (Mon-Fri 9am-5pm) 01225 825990

Urology Outpatient Nurses (Mon-Fri 9am-5pm) 01225 824034

Uro-Oncology Nurse Specialists (Mon-Fri 9am-5pm) 01225 824250

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If you would like this leaflet in email form, large print, braille or another language, please contact the Patient Support and Complaints team on 01225 825656.

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